

What is Claimed is:

- [c1] A serializer/deserializer for data, comprising:
 - a transmitter for transmitting the data;
 - a receiver for receiving the data; and
 - a self-test circuit coupling data transmitted from the transmitter of the receiver, and for reducing the time period during which data can be received by the receiver.
- [c2] 2. A self-test system for randomly adjusting the time period in which data windows are present in a data signal, comprising:
 - a time adjust system introducing time changes in a data window during which the signal may be sensed; and
 - an activator enables on a random time basis the time adjust system to introduce time delays in the data window.
- [c3] 3. The self-test system of claim 2, wherein the time adjust system introduces a time delay in the opening of the time window.
- [c4] 4. The self-test system of claim 2, wherein the time adjust system introduces an advance in the closing of the time window.
- [c5] 5. The self-test system of claim 2, wherein the activator includes a random digital number generator.
- [c6] 6. The self-test system of claim 5, wherein the random digital number generator comprises a linear feedback shift register.
- [c7] 7. The self-test system of claim 5, wherein the activator includes a decoder for detecting presence of a defined sequence of digital code in the random digital number output of the random digital number generator.
- [c8] 8. The self-test system of claim 2, wherein the activator includes a random digital number generator; and a decoder for detecting presence of a defined sequence of digital code in the random digital number output of the random digital number generator.

- [c9] 9. A data communication system, comprising: a transmitter for transmitting the data;
a receiver for receiving the data; and
a self-test system for randomly adjusting the time period in which data windows are present in a data signal.
- [c10] 10. The data communication system wherein the self-test system comprises:
a time adjust system introducing time changes in a data window during which the signal may be sensed; and
an activator for periodically activating on a random basis the time adjust system to introduce time delays in the data window.
- [c11] 11. The data communication system of claim 10, wherein the time adjust system introduces a time delay in the opening of the time window.
- [c12] 12. The data communication system of claim 10, wherein the time adjust system introduces an advance in the closing of the time window.
- [c13] 13. The data communication system of claim 10, wherein the activator includes a random digital number generator.
- [c14] 14. The data communication system of claim 13, wherein the random digital number generator comprises a linear feedback shift register.
- [c15] 15. The data communication system of claim 14, wherein the activator includes a decoder for detecting presence of a defined sequence of digital code in the random digital number output of the random digital number generator.
- [c16] 16. The data communication system of claim 10, wherein the activator includes:
a random digital number generator; and
a decoder for detecting presence of a defined sequence of digital code in the random digital number output of the random digital number generator.